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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,886	06/29/2001	Collin P. Galloway	00066CON	1023

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EXAMINER

HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,886

Applicant(s)

GALLOWAY ET AL.

Examiner

Cynthia Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-73, 75-86, 111-118 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☒ Claim(s) 56-73, 83-86, 112-113 are allowed.

- 6) ☒ Claim(s) _____ is/are rejected. 75-82, 111, 115-118 are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2005/16/08

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 75-82 and 115-118 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 75 recites in lines 4-5 that the polymeric coating is “not substantially extractable by an organic solvent”. Such a phrase renders the claim indefinite. In this case there is absolutely no guidance as to what is meant by the phrase, such as which organic solvents or the conditions under which the polymer is not extractable. The only place this limitation is mentioned is in paragraph [0060], but with no explanation as to its meaning. Without more guidance, one of ordinary skill in the art would not know when they would be infringing the claim and when they would not. The examiner notes that if applicants can prove that “substantially extractable by an organic solvent” has some well recognized meaning in the art or is defined in the specification in such a manner as to make such limits clear to the worker of ordinary skill in the art that this rejection would be overcome.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 75-76, 79-82, 115 and 118 are rejected under 35 U.S.C. 102(b) as being anticipated by Senga et al (4,873,166). It appears that Senga et al anticipate the plate of a least instant claims 75-76, 79-82, 115 and 118. In col. 14, lines 5-9, Senga et al disclose a printing plate made by taking an aluminum plated (corresponding the recited substrate) that has been subjected to a hydrophilizing treatment, coating the plate with e- type copper phthalocyanine (corresponding with the recited pigment) dispersed in an acrylic resin (corresponding with the polymeric coating comprising an acrylic polymer), and drying the plate. Because the particles are dispersed in the resin when the particles are coated onto the plate, then dried, the particles would inherently be at least partially coated with the acrylic resin. Further more the dried

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coating on the plate would inherently be able to absorb at least some radiation, and therefore would correspond to the recited "radiation absorptive layer". The last issue that needs to be considered is the recitation that the polymeric coating is "not substantially extractable by an organic solvent". Again this would appear to be inherent in the dried acrylic resin of Senga et al for at least a couple of reasons. Applicants give no guidance in the disclosure or claims as to what is meant by "not substantially extractable in an organic solvent.:" Does this meant all solvents or would this limitation be met as long as the polymer is not solvent in one organic solvent? What conditions did applicant intend for an extraction test? In other words if one were to contact the polymer with an alcohol for one second and most of the polymer remains, is it "substantially insoluble"? Without any guidance by applicant to determine what is meant by the phrase, it would be appropriate to take a very broad reading of the phrase. Consequently, my position is that there is at least one organic solvent that the acrylic resin of Senga et al is not soluble in, and, therefore, this would lead to the conclusion that the limitation is inherent in the plate of Senga et al. Furthermore, my position is also that there are certain extraction conditions that could be selected such that given an organic solvent; the extraction would no "substantially" extract the dried acrylic resin of Senga et al. Again, this would lead to the conclusion that the plate of Senga et al inherently meets that limitation of the claims. The acrylic resin is the "polymer" of claim 76 as well.

6. Claims 75-76, 79-80, 115 and 118 are rejected under 35 U.S.C. 102(a or e) as being anticipated by Kato et al (6,080,449). It appears that Kato et al anticipate the plate of at least instant claims 75-76, 79-80, 115 and 118. In col. 23-26 as well as Examples with special reference to Example 16, Kato et al disclose a printing plate which is formed from coating the

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plate with base having an acrylic/styrenic polymer coating over a zinc oxide (a pigment).

Because the particles are dispersed in the resin when the particles are coated onto the plate, then dried, the particles would inherently be at least partially coated with the polymer. Further more the dried coating on the plate would inherently be able to absorb at least some radiation, and therefore would correspond to the recited "radiation absorptive layer". The last issue that needs to be considered is the recitation that the polymeric coating is "not substantially extractable by an organic solvent". Again this would appear to be inherent in the polymers of Kato et al for at least a couple of reasons. Applicants give no guidance in the disclosure or claims as to what is meant by "not substantially extractable in an organic solvent.:" Does this meant all solvents or would this limitation be met as long as the polymer is not solvent in one organic solvent? What conditions did applicant intend for an extraction test? In other words if one were to contact the polymer with an alcohol for one second and most of the polymer remains, is it "substantially insoluble"? Without any guidance by applicant to determine what is meant by the phrase, it would be appropriate to take a very broad reading of the phrase. Consequently, my position is that there is at least one organic solvent that the polymer of Kato et al is not soluble in, and, therefore, this would lead to the conclusion that the limitation is inherent in the plate of Kato et al. Furthermore, my position is also that there are certain extraction conditions that could be selected such that given an organic solvent; the extraction would no "substantially" extract the polymer of Kato et al. Again, this would lead to the conclusion that the plate of Kato et al inherently meets that limitation of the claims.

7. Claims 75-76, 79-82, and 115-118 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al (6,218,073 B1). It appears that Shimizu et al anticipate the plate of

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at least instant claims 75-76, 79-82, and 115-118. The plates of Example 1 anticipate the instant plate wherein the acrylate resin grafted carbon black is a carbon black pigment coated with acrylic resin which is also attached by graft in a layer along with the acrylic polymer polymer particles, i.e. the added polymer.

8. Claims 111 and 115 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 111 is as follows:

111. (new) The printing plate of claim 4 65, wherein the radiation absorbed by the radiation-absorptive layer is infrared or near-infrared.

Claim 65 is as follows:

65. (original). A printing plate comprising: a) a substrate and b) a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment having attached at least one organic group represented by the formula -X-Sp-[SMA]R, wherein X, which is directly attached to the pigment, represents an arylene, heteroarylene, or alkylene group, Sp represents a spacer group, SMA represents a styrene-maleic anhydride polymer or derivative, and R represents hydrogen, a substituted or unsubstituted alkyl group, or a substituted or unsubstituted aryl group.

The examiner is unsure what is meant by an action of absorbing "infrared or near-infrared" radiation with respect to a claim drawn to an element, i.e. the printing plate. Is this an attempt to limit the nature of the radiation absorptive layer to "infrared or near-infrared" or is this an attempt to add a process step to an element which is confusing? Does "infrared or near-infrared" absorption refer to intended use of the printing plate and thus have little probative value with respect to the plate or does "infrared or near-infrared" reference a property of the plate that

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limits the nature of the radiation-absorptive layer? The same problem exists in claim 115 with respect to claim 75. The examiner notes that the ability to absorb "infrared or near-infrared" radiation, if this is the limit, in the printing plate radiation-absorptive layer does not require in any way that the modified pigment property have this property. Thus, the limits of claims 111 and 115 are confusing.

9. **This examiner strongly urges applicants amend record with any art which supports meaning of "substantially extractable by an organic solvent" as to limit it in any fashion which would be recognized by persons of ordinary skill in the art so as to exclude prior art like that used in this Office Action.**

10. Claims 56-73, 83-86 and ~~112-113~~ are allowed.

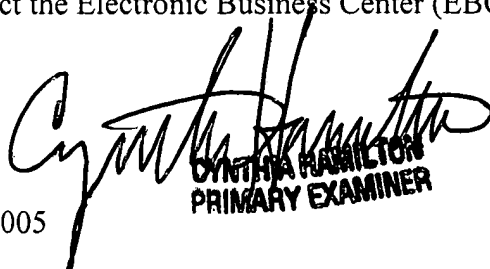
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331.

The examiner can normally be reached on Monday through Friday 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 30, 2005


CYNTHIA HAMILTON
PRIMARY EXAMINER

Cynthia Hamilton
Primary Examiner
Art Unit 1752